**INFORMATION** 



# BOARD OF EDUCATION OF HOWARD COUNTY MEETING AGENDA ITEM

TITLE:	SAT Results for the Class of 2011	DATE:	October 20, 2011
Presenter(s):	Rebecca Amani-Dove, Director of Student Assessment and Progra	am Evalua	tion
<b>A</b>			

#### **OVERVIEW:**

The HCPSS graduating class of 2011 achieved outstanding scores on the SAT, with average scores of 542 in Critical Reading, 561 in Mathematics, and 542 in Writing. Howard County's scores continue to outpace the state and national averages and represent increases from the system's performance in 2010. A total of 3,129 HCPSS students, nearly 80 percent of the Class of 2011, participated in the SAT, which represents the highest number of HCPSS participants ever.

While the average state and national scores declined across all subtests, Howard County realized increases of four points in Mathematics, and one point each in Critical Reading and Writing. The HCPSS composite score increased six points from 1639 to 1645, while the Maryland and national composite scores each dropped six points.

#### **Recommendation**/Future Direction:

As the HCPSS enhances the delivery of instruction through the Race to the Top initiative and infuses the Common Core State Standards into the instructional program, it is increasingly important that each and every student is prepared for college and careers. The HCPSS remains focused on ensuring that students have opportunities to take and excel on either of the widely accepted college entrance exams – SAT or ACT. These exams not only open doors for our students after they leave the HCPSS, but they provide valuable information to staff about the college preparedness of exiting seniors.

> Approval/ Concurrence:

## Submitted

by:

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#### Background

This report focuses on the class of 2011 participation and performance on the SAT. Because increasing numbers of HCPSS students are choosing to take the ACT in addition to or in lieu of the SAT each year, this report also includes data on ACT participation and performance. The HCPSS set a target of 80 percent participation in either exam among students in the graduating class of 2011.

The SAT is an assessment published by the College Board and designed to measure college readiness in critical reading, mathematics, and writing. The test is comprised of selected response items, student-produced response items, and an essay. Each section is scored on a scale that ranges from 200 (lowest) to 800 (highest). The maximum composite score, combining all three sections is 2400.

The ACT test assesses high school students' general educational development and their ability to complete college-level work in four skill areas: English, mathematics, reading, and science. It also includes an optional writing test that measures skill in planning and writing a short essay. The score range for each of the four tests is 1 to 36. The composite score is the average of the four test scores earned during a single test administration, rounded to the nearest whole number.

Note that SAT results published in this report may differ slightly from those reported by the College Board. The College Board data reflect information gathered from students directly at the time of testing. HCPSS then matches the data reported by the College Board to our official data files, corrects errors, and verifies that the results reflect only the test takers from the graduating class of 2011.

## College and Career Readiness

The HCPSS instructional program is designed to help all students prepare for college and careers. For example, within the Division of Instruction (DOI), curriculum staff collaborate with counselors to ensure that students enroll in rigorous courses preparing them for college and career readiness.

HCPSS also encourages all students to take the PSAT in grades 10 and 11, at no cost to the student. The PSAT enables students to experience a similar exam to the SAT, build endurance, and allay test anxiety. Results from the PSAT also provide staff with valuable information about students who may benefit from more rigorous college preparatory coursework in grades 11 and 12. Results also are used to help English and mathematics teachers provide targeted SAT practice support for students.

HCPSS also offers an SAT Prep course for students who would benefit from additional support to prepare for success on the SAT. Students enrolled in the HCPSS after school SAT Prep are provided weekly SAT Prep instruction for eight weeks, given a mock SAT on a Saturday, and encouraged to take the SAT two times. The results of the SAT Prep course have been promising.

Attendance at the after school SAT Prep course presents challenges for some students who have responsibilities at home, extracurricular activities, or jobs after school. Seven schools offer SAT Prep during the school day, which benefits students presented with these challenges.

Lastly, in November 2011 and February 2012, high school teachers will participate in professional development addressing the use of vertical teams to improve SAT preparation for all students.

# HCPSS Class of 2011 SAT and ACT Participation

SAT participation has increased with each graduating class. Among students in the graduating class of 2011, 3,129 took the SAT, reflecting an increase of 314 participants in comparison with the class of 2007 (Table 1).

	SAT Participation, 2007-2011, By Students Overall and Gender						
	2007	2008	2009	2010	2011	1-Year	5-Year
						Gain	Gain
Overall	2,815	2,834	2,820	3,021	3,129	+108	+314
Male	1,368	1,350	1,330	1,475	1,543	+68	+175
Female	1,447	1,484	1,490	1,546	1,586	+40	+139

 Table 1

 SAT Participation, 2007-2011, By Students Overall and Gender

Table 2 shows the percent of the HCPSS students in the class of 2011 who participated in the SAT and/ or ACT by racial/ethnic group. The participation rate of 80.9 percent exceeded the HCPSS standard of 80 percent participation in either college entrance exam. Participation rates ranged from 66.3 percent for students identified as Hispanic or Latino of Any Race to 87.9 percent of students identified as Asian. Note that trend data is not provided for the racial/ethnic groups because of implementation of the new race codes in 2011.

Table 2SAT and/or ACT Participation by Racial/Ethnic Group, Class of 2011

Racial/Ethnic Group	Percent of Group Participated in the SAT <sup>1</sup>	Percent of Group Participated in the SAT and/or ACT <sup>2</sup>
All	79.3	80.9
Asian	87.4	87.9
Black/African American*	68.3	70.0
Hispanic/ Latino of Any Race*	65.5	66.3
White	82.2	83.9
Two or More Races	82.4	85.4

<sup>1</sup>Includes students who took the SAT only and students who took both the SAT and ACT.

<sup>2</sup> Includes students who took the SAT only, both the SAT and ACT, and the ACT only.

\* Indicates student groups that did not meet the HCPSS SAT/ACT participation standard of 80 percent. Note: Due to fewer than 10 students in each group, data are suppressed for American Indian or Alaskan Native and Native Hawaiian or Other Pacific Islander. Sixty percent of students took the SAT only, nineteen percent took the SAT and ACT, and one percent took the ACT only (Figure 1). Among the racial/ethnic groups, participation in both tests ranged from 22 percent among students identified as White to eleven percent among students identified as Hispanic or Latino of Any Race. Participation in the ACT only was three percent or lower for each racial/ethnic group.



Note: Percentages may not add to 100 due to rounding error.

## **Class of 2011 SAT and ACT Performance**

The HCPSS graduating class of 2011 achieved a composite score of 1645, representing an increase of six points from the class of 2010. This composite score is well above those of Maryland (1492) and the nation (1500) and reflects increases in each of the three sections—542 in Critical Reading, 561 in Mathematics, and 542 in Writing (Table 3).

# Table 3SAT Mean Scores for the Graduating Classes of 2010 and 2011 for HCPSS,<br/>Maryland, and the Nation

	Critical Reading		Mathe	Mathematics		Writing		Composite	
	2010	2011	2010	2011	2010	2011	2010	2011	
HCPSS	541	542	557	561	541	542	1639	1645	
Maryland	500	499	505	502	493	491	1498	1492	
Nation	500	497	515	514	491	489	1506	1500	

Note: Data reflect the most recent SAT score for each graduate.

Sources: HCPSS results generated by internal reporting system. Maryland and national results are from *Maryland – All Schools Overview 2010–2011*, published by the College Board.

Students in the graduating class of 2011 achieved scores that were five points higher than those of the graduating class of 2007 on each of the three sections of the SAT (Table 4).

Table 4HCPSS SAT Mean Scores for the Graduating Classes of 2007-2011 by Section

	2007	2008	2009	2010	2011	5-year Change
Critical Reading	537	540	542	541	542	+5
Mathematics	556	557	558	557	561	+5
Writing	537	544	541	541	542	+5

Table 5, below, presents the mean SAT scores for the class of 2011 by racial/ethnic group. HCPSS has identified a score of 500 on each SAT section as an indicator of college and career readiness. The average scores for all racial/ethnic groups except Black or African American were above 500.

Table 5HCPSS Class of 2011 Mean SAT Scores by Racial/Ethnic Group

Racial/Ethnic Group	Critical Reading	Mathematics	Writing	Composite
All	542	561	542	1645
Asian	560	617	573	1751
Black/African American	471	471	466	1407
Hispanic/Latino	504	514	503	1522
White	558	575	559	1692
Two or More Races	550	557	546	1652

Overall, for test-takers in the HCPSS graduating class of 2011, the average ACT composite score was 24. Results by racial/ethnic group are provided in Table 6, below.

#### Table 6

Racial/Ethnic Group	Composite		
All	24		
Asian	27		
Black/African American	20		
Hispanic/Latino	25		
White	25		
Two or More Races	23		

HCPSS Class of 2011 Mean ACT Composite Score by Racial/Ethnic Group

## **Results by School**

Seven of the HCPSS high schools met or exceeded the participation standard of 80 percent of students in the class of 2011 participating in either the SAT or ACT. River Hill High School had the highest participation rate with 91.8 percent of students taking either college entrance exam. Table 7, below, displays the percentages of students in each high school's graduating class of 2011 who took college entrance exams.

Student Group	Percent of Class Participated in the SAT <sup>1</sup>	Percent of Class Participated in the SAT and/or ACT <sup>2</sup>
Atholton	85.4	86.7
Centennial	85.7	87.3
Glenelg	81.7	84.3
Hammond*	71.3	71.9
Howard	82.2	83.0
Long Reach*	70.0	75.1
Marriotts Ridge	81.6	83.2
Mount Hebron	83.1	84.1
Oakland Mills*	74.4	74.4
Reservoir*	74.3	74.6
River Hill	89.7	91.8
Wilde Lake*	67.8	69.1

Table 7 SAT Participation for the Class of 2011, by HCPSS High School

<sup>1</sup>Includes students who took the SAT only and students who took both the SAT and ACT.

<sup>2</sup> Includes students who took the SAT only, both the SAT and ACT, and the ACT only.

\* Indicates schools that did not meet the HCPSS SAT/ACT participation standard of 80 percent.

Figure 2, below, shows the percentages of students who took the SAT only, the SAT and ACT, the ACT only, and those who did not take any college entrance exams by high school. Note that in each school, the majority of students who took the ACT also took the SAT. Long Reach High School had five percent of students in the graduating class of 2011 take the ACT only, the highest ACT only participation rate in the county.



Figure 2

Every high school exceeded the college and career advantage indicators of college readiness, attaining average scores of 500 or above in critical reading and mathematics. Eleven of the twelve high schools exceeded the college and career advantage indicator of 500 in writing. Every high school also outperformed the state and nation for each of the SAT sections and the composite. All but one high school met or exceeded the average composite scores of 22 on the ACT (Table 8).

Table 8
SAT and ACT Performance for the Class of 2011, by HCPSS High School

		Mean ACT Score			
School	Critical Reading	Mathematics	Writing	Composite	Composite
Atholton	562	577	563	1702	25
Centennial	583	613	584	1780	26
Glenelg	539	566	541	1645	24
Hammond	509	518	505	1532	21
Howard	524	546	525	1594	24
Long Reach	502	517	507	1526	22
Marriotts Ridge	562	574	567	1704	23
Mt. Hebron	544	569	546	1659	24
Oakland Mills	508	525	499	1533	22
Reservoir	518	527	509	1553	23
River Hill	577	611	595	1783	27
Wilde Lake	529	538	518	1584	22

Note: Percentages may not add to 100 due to rounding error.

# Summary

The graduating class of 2011 achieved excellent SAT scores, well above the state and national averages. Participation also increased in 2011 with 108 additional test takers than the previous graduating class. Seven high schools met the system standard of 80 percent participation.

The composite scores for HCPSS overall and each individual high school were greater than the state and national averages.

The HCPSS instructional program focuses on college and career readiness for all students. Targeted supports are in place to continue to increase the number of students who participate in the SAT or ACT, and to ensure that they meet these exams with success.